

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)
2. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to ~~claim 12~~claim 1, wherein
the yoke layer extends from a first position recessed from the recording-medium-facing surface to a second position at the rear of the first position,
the pole layer extends from the recording-medium-facing surface to the second position, and has a smaller width than the width of the yoke layer.
3. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to ~~claim 12~~claim 1, wherein
the yoke layer extends from a first position recessed from the recording-medium-facing surface to a second position at the rear of the first position, and
the pole layer extends from the recording-medium-facing surface to a third position between the first position and the second position.
4. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to claim 3, wherein
the yoke layer includes:
a connecting portion having a part connected to the pole layer, and
a yoke widening portion having a larger width than the width of the connecting ~~portion~~portion,
wherein the connecting portion is closer to the recording-medium-facing surface relative to the yoke widening portion.

5. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to claim 4, further comprising:

a thin film coil generating magnetic flux, and having a winding structure wound around an end portion of the yoke layer on a side farther from the recording-medium-facing surface,

wherein ~~assuming that~~ when an area of an end surface of the end portion in the yoke layer is SE, and an area of a sectional surface of the connecting portion parallel to the recording-medium-facing surface is SD, an area ratio SD/SE is within a range of $0.008 \leq SD/SE \leq 0.3$.

6. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to claim 12~~claim 1~~, wherein

a ~~recession~~ recess is disposed in ~~at least a part of~~ a portion of the yoke layer ~~except for~~ away from where the yoke layer is a portion connected to the pole layer.

7. (Currently Amended) ~~A thin film~~ The perpendicular magnetic recording head according to claim 12~~claim 1~~, wherein

the pole layer includes:

a pole uniform width portion ~~being exposed to the recording-medium-facing surface, and~~ having a uniform width determining a recording track width of the recording medium, and

a pole widening portion having a larger width than the width of the pole uniform width ~~portion~~ portion,

wherein the pole uniform width portion is closer to the recording-medium-facing surface relative to the pole widening portion.

8-9. (Canceled)

10. (Withdrawn) A method of manufacturing a thin film magnetic head, comprising the steps of:

forming a yoke layer so as to be recessed from a recording-medium-facing surface facing a recording medium moving in a predetermined direction of medium movement; and

forming a pole layer on a medium-outgoing side of the yoke layer in the direction of medium movement so as to be exposed to the recording-medium-facing surface, wherein a portion of the pole layer is connected to a portion of the yoke layer.

11. (Withdrawn) A method of manufacturing a thin film magnetic head according to claim 10,

wherein the step of forming the yoke layer includes the steps of:

forming a precursor yoke layer pattern;

forming a precursor pole layer so that the precursor yoke layer pattern is covered with the precursor pole layer; and

forming the pole layer through etching the precursor pole layer to be patterned, and forming the yoke layer through continuously etching at least a part of a portion of the precursor yoke layer pattern except for a portion to be connected to the pole layer so as to be recessed.

12. (New) A perpendicular magnetic recording head, comprising:

a yoke layer disposed so as to be recessed from a recording-medium-facing surface facing a recording medium moving in a predetermined direction of medium movement;

a pole layer disposed on a medium-outgoing side of the yoke layer in the direction of medium movement so as to be exposed to the recording-medium-facing surface;

an auxiliary pole layer disposed on the medium-outgoing side of the pole layer so as to be recessed from the recording-medium-facing surface and spaced from the yoke layer; and

a non-magnetic layer disposed between the pole layer and the auxiliary pole layer in a region where the pole layer and the auxiliary pole layer face each other,

wherein a portion of the pole layer is connected to a portion of the yoke layer.

13. (New) The perpendicular magnetic recording head according to claim 12, wherein

the auxiliary pole layer includes:

an auxiliary pole uniform width portion having a uniform width; and

an auxiliary pole widening portion having a larger width than the width of the auxiliary pole uniform width portion,

wherein the auxiliary pole uniform width portion is closer, relative to the auxiliary pole widening portion, to a position connecting the pole uniform width portion and the pole widening portion.

14. (New) A perpendicular magnetic recording head, comprising:

a yoke layer disposed so as to be recessed from a recording-medium-facing surface facing a recording medium moving in a predetermined direction of medium movement; and

a pole layer disposed on a medium-outgoing side of the yoke layer in the direction of medium movement so as to be exposed to the recording-medium-facing surface,

wherein the pole layer includes a pole uniform width portion having a uniform width determining a recording track width of the recording medium and a pole widening portion having a larger width than the width of the pole uniform width portion, and where the pole uniform width portion is closer to the recording-medium-facing surface relative to the pole widening portion,

the yoke layer includes a connecting portion having a uniform width larger than the width of the pole uniform width portion and smaller than the width of the pole widening portion and a yoke widening portion having a width larger than the width of the connecting portion, and where the connecting portion is closer to the recording-medium-facing surface relative to the yoke widening portion, and

a portion of the pole widening portion in the pole layer is connected to at least a portion of the connecting portion in the yoke layer.

15. (New) The perpendicular magnetic recording head according to claim 14, wherein

a recess is disposed in a portion of the yoke layer away from where the yoke layer is connected to the pole layer.